

Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

November 28, 2014

Zimmer, Inc.
Stephen H. McKelvey, MA, RAC
Senior Project Manager, Trauma Regulatory Affairs
P.O. Box 708
Warsaw, Indiana 46581-0708

Re: K143066

Trade/Device Name: Zimmer® Plates and Screws System (ZPS) – Non-sterile ZPS Plate

Line Extensions, Sterile/Non-sterile ZPS Screws and Washers

Regulation Number: 21 CFR 888.3030

Regulation Name: Single/Multiple Component Metallic Bone Fixation Appliances and

Accessories

Regulatory Class: Class II

Product Code: HRS, HTN, HWC

Dated: October 23, 2014 Received: October 31, 2014

Dear Mr. McKelvey:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing

(21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<u>http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm</u> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Lori A. Wiggins -S

for
Mark N. Melkerson
Director
Division of Orthopedic Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

## DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

## Indications for Use

Form Approved: OMB No. 0910-0120 Expiration Date: January 31, 2017 See PRA Statement below.

510(k) Number (if known)

K143066

**Device Name** 

Zimmer Plates and Screws System (ZPS) - Non-sterile ZPS Plate Line Extensions, Sterile/Non-Sterile ZPS Screws and Washers

Indications for Use (Describe)

ZPS One-Third Tubular Plates, One-Quarter Tubular Plates, T-Plates, L-Buttress Plates, Cobra Plates, Semi-Tubular Plates, Symphyseal Bridge Plates, Reconstruction Plates, and Contourable Dual Compression Plates are indicated for temporary internal fixation and stabilization of osteotomies and fractures, such as:

- comminuted fractures
- supracondylar fractures
- extra-articular fractures
- fractures in osteopenic bone
- nonunions
- malunions

Smaller-sized ZPS plates are used for small bones and small fragments of the hands and feet.

ZPS Calcaneal plates are indicated for temporary internal fixation and stabilization of osteotomies and fractures of the calcaneus. ZPS and Forte Screws are temporary internal fixation devices designed to stabilize fractures during the normal healing process

Type of Use (Select one or both, as application)	able)		_
Prescription Use (Part 2	1 CFR 801 Subpart D)	Over-The-Counter Use (21 CFR 801 Subpart C)	_

#### PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON A SEPARATE PAGE IF NEEDED.

#### FOR FDA USE ONLY

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

This section applies only to requirements of the Paperwork Reduction Act of 1995.

#### \*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\*

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"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."

## 510(k) Summary

**Sponsor:** Zimmer, Inc.

P.O. Box 708

Warsaw, IN 46581-0708

**Contact Person:** Stephen H. McKelvey

Senior Project Manager, Trauma Regulatory Affairs

Telephone: (574) 372-4944

Fax: (574) 371-8760

Date: October 23, 2014

Zimmer<sup>®</sup> Plates and Screws System (ZPS) – Non-Sterile **Trade Name:** 

ZPS Plate Line Extensions, Sterile/Non-Sterile ZPS

Screws and Washers

**Common Name: Temporary Internal Fixation Devices** 

**Classification Names** Single/multiple component metallic bone fixation

and References: appliances and accessories (21 CFR 888.3030, HRS and HTN) and Smooth or threaded metallic bone fixation

fastener (21 CFR 888.3040, HWC)

**Classification Panel:** Orthopedics/87

**Predicate Device(s):** Zimmer Plates and Screws System (ZPS) (K140508,

cleared August 14, 2014)

TMP Micro-plating System (Anspach/Techmedica,

K921458, cleared July 17, 1992)

**Purpose and Device Description:** The Zimmer Plates and Screws System (ZPS) is a

> nonlocking, stainless steel plate and screw system. Plate shapes vary to address varying patient bone sizes and injury fragment sizes. Plates incorporate a spherical sliding slope plate hole design to achieve the compression required to treat bone fractures. The plates are used with a variety of screws for temporary fixation to the bone. The ZPS Washers are intended to prevent a screw head from breaking through the cortex of the bone by distributing the

forces/load over a larger area when used for non-plate, bone fragment, and fracture fixation.

#### **Intended Use:**

ZPS One-Third Tubular Plates, One-Quarter Tubular Plates, T-Plates, L-Buttress Plates, Cobra Plates, Semi-Tubular Plates, Symphyseal Bridge Plates, Reconstruction Plates, and Contourable Dual Compression Plates are indicated for temporary internal fixation and stabilization of osteotomies and fractures, such as:

- comminuted fractures
- supracondylar fractures
- extra-articular fractures
- fractures in osteopenic bone
- nonunions
- malunions

Smaller-sized ZPS plates are used for small bones and small fragments of the hands and feet.

ZPS Calcaneal plates are indicated for temporary internal fixation and stabilization of osteotomies and fractures of the calcaneus. ZPS and Forte Screws are temporary internal fixation devices designed to stabilize fractures during the normal healing process.

## **Comparison to Predicate Device:**

The ZPS Plates, Screws and Washers are similar in intended use, basic shape, compatible diameters, materials and performance characteristics to the predicate devices.

# Performance Data (Nonclinical and/or Clinical):

#### Non-Clinical Performance and Conclusions:

- Biocompatibility Biocompatibility testing on the plate, screw, and washer material was conducted per ISO 10993-1 and Good Laboratory Practices (21 CFR § 58). All testing passed.
- Beam bending cross sectional analysis of the ZPS
  Plates and the predicate devices, Zimmer Plate and
  Screw System (K140508) and the TMP Micro-Plating
  System (K921458), resulted in similar mechanical
  properties. The subject and predicate devices are
  substantially equivalent.
- The subject screws are substantially equivalent to those cleared in K140508 and are a line extension to screw types already cleared in K140508.

• The subject washers are substantially equivalent to and are a line extension to the washer cleared in K140508.

## Clinical Performance and Conclusions:

 Clinical data and conclusions were not needed for these devices.